The listing of claims presented below replaces all prior versions and listing of claims in the application.

Listing of claims

1. (Currently Amended) A process for the preparation of metal-coated polymer nano-fibres, ~~characterised by~~ comprising the ~~following~~ steps of:

a) preparing a polymer nano-fibre with functional groups comprising epoxy rings providing the binding ability to a reducing reagent by electro-spinning at ambient conditions;

b) contacting the electrospun polymer nano-fibre obtained in step a) with a reducing agent, thereby opening the epoxy rings on the surface of polymer nano-fibre and replacing with the reducing agent;

c) reacting the reducing agent modified polymer film obtained in step b) with a metal salt solution in alkaline media and obtaining an electro-spun mat; and

d) treating the electrospun mat obtained in step c) with water to open the epoxy rings in the structure and crosslinking the chains to provide integrity.

2. (Currently Amended) Process according to claim 1, ~~characterised in that~~ wherein the polymer in step a) is obtained by radical or condesation polymerisation of 1) monomers ~~chosen~~ selected from the group consisting of ~~comprising~~ vinylic monomers and difunctional monomers with ll) functional monomers ~~chosen~~ selected from the group consisting of ~~comprising~~ acrylates, epoxides, acrylamides, and acidic comonomers.

3. (Currently Amended)   Process according to claim 2, ~~characterised in that~~ <u>wherein</u> the polymer in step a) is ~~chosen~~ <u>selected</u> from the group <u>consisting of</u> ~~comprising~~ poly (acrylonitrile-co-glycidylmethacrylate) and poly (styrene~~-co~~-co- glycidylmethacrylate).

4. (Cancelled)

5. (Currently Amended)   Process according to claim [[4]] <u>11</u>, ~~characterised in that~~ <u>wherein</u> the reducing agent in step b) is hydrazine.

6. (Currently Amended)   Process according to claim 1, ~~characterised in that~~ <u>wherein</u> the metal solution in step c) comprises soluble transition metal salts in a solvent, <u>said solution</u> <u>selected from the group consisting of</u> ~~comprising~~ AgNO$_3$ in water, AgCl in water, ~~NiCol$_2$~~ <u>NiCl$_2$</u> in water, and PdCl$_2$ in DMF.

7. (Withdrawn/Currently Amended)   Metal-coated polymer nano-fibres obtained by the process ~~in accordance to~~ <u>of</u> claim 1.

8. (Withdrawn/Currently Amended)   <u>A method comprising using</u> metal-coated polymer nano-fibres in applications ~~chosen~~ <u>selected</u> from the group <u>consisting of</u> nanotubes, catalysts, conductors, solar cells, electrodes for sensors, electrochemical actuators, proton exchange membranes and electrodes, hydrogen storage membranes, high density packing structures, thin film transistors, reflectors, compact disks and decorative applications.

9. (Withdrawn/Currently Amended)   A catalyst ~~Catalysts~~ containing metal-coated polymer nano-fibers obtained in accordance [[to]] with claim 1.

10. (Withdrawn/Currently Amended)   A conductor ~~Conductors~~ containing metal-coated polymer nano-fibers obtained in accordance [[to]] with claim 1.

11. (New)   Process according to claim 1, wherein the reducing agent in step b) is selected from the group consisting of hydrazine, alkali borohydride, CuCI, and $SnCl_2$.